



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

November 1, 2001

Kenneth E. May, Mine Manager  
Canyon Fuel Company, LLC.  
397 South 800 West  
Salina, Utah 84645

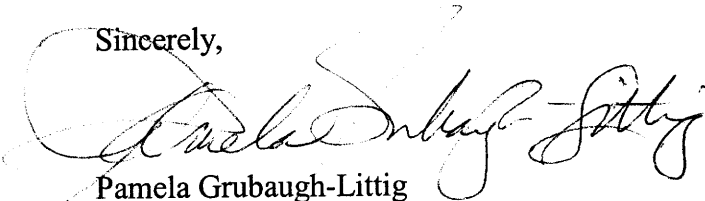
RE: Sewer and Water System, Canyon Fuel Company, LLC., SUFCO Mine, C/041/002-AM01C-1, Outgoing File

Dear Mr. May:

The above-referenced amendment is approved effective November 1, 2001. A stamped incorporated copy is enclosed for your copy of the Mining and Reclamation Plan.

If you have any questions, please feel free to call me at (801) 538-5268.

Sincerely,

  
Pamela Grubaugh-Littig  
Permit Supervisor

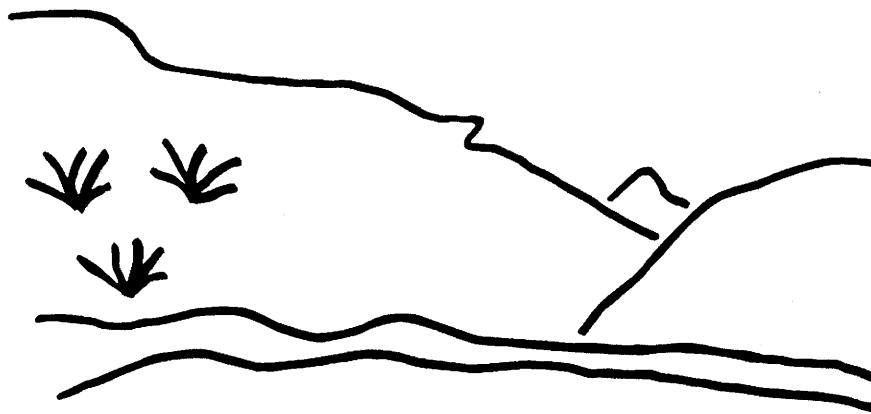
sjd/sd

Enclosure

cc Joe Wilcox, OSM  
Richard Manus, BLM  
Elaine Zieroth, USFS (2)  
Rob Mrowka, USFS, Richfield  
Mark Page, Water Rights, w/o enc  
Dave Ariotti, DEQ, w/o enc  
Derris Jones, DWR, w/o enc  
Price Field Office

O:\041002.CON\FINAL\app01C.doc

# State of Utah



## Utah Oil Gas and Mining

### Coal Regulatory Program

SUFCO Mine  
Sewer and Water System  
C/041/002-01C-1  
Technical Analysis  
October 25, 2001

## TABLE OF CONTENTS

---

<b>INTRODUCTION.....</b>	<b>1</b>
<b>OPERATION PLAN .....</b>	<b>3</b>
TOPSOIL AND SUBSOIL.....	3
Removal and Storage .....	3
VEGETATION .....	4
HYDROLOGIC INFORMATION .....	4
Exemptions for siltation structures .....	5
SUPPORT FACILITIES AND UTILITY INSTALLATIONS .....	5
MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS.....	6
Mining facilities maps.....	7
<b>RECLAMATION PLAN.....</b>	<b>9</b>
BONDING AND INSURANCE REQUIREMENTS.....	9
General.....	9
<b>RULES INDEX .....</b>	<b>11</b>

INTRODUCTION

---

## TECHNICAL ANALYSIS

### INTRODUCTION

The SUFCO Mine has submitted an amendment to expand the capacity of existing culinary water system and sanitary drain field. These two upgrades to the water and sewer system will not require any increase in the US Forest Service Special Use Permit area, nor will the disturbed area change.

With an increase of production, the SUFCO Mine has hired twenty-five additional people and has worked extra days during the week. The present culinary water system at the mine site has a capacity of 20,000 gallons. The permittee wishes to expand the system to 40,000-gallon capacity by adding two 10,000-gallon tanks. The additional water capacity is needed to facilitate showers, disposal of sewage, dust suppression, and fire fighting capability.

The sewer system expansion is required due to the increase of shower water and sewage usage.

Page 2  
C/041/002-01C-1  
October 25, 2001

## INTRODUCTION

---

## OPERATION PLAN

# OPERATION PLAN

## TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

### Minimum Regulatory Requirements:

#### Topsoil removal and storage

All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. Where the topsoil is of insufficient quantity or of poor quality for sustaining vegetation, the selected overburden materials approved by the Division for use as a substitute or supplement to topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

The Division may choose not to require the removal of topsoil for minor disturbances which occur at the site of small structures, such as power poles, signs, or fence lines; or, will not destroy the existing vegetation and will not cause erosion.

All materials shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

Selected overburden materials may be substituted for, or used as a supplement to, topsoil if the operator demonstrates to the Division that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the best available in the permit area to support revegetation.

Materials removed shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas. Stockpiled materials shall: be selectively placed on a stable site within the permit area; be protected from contaminants and unnecessary compaction that would interfere with revegetation; be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the Division; and, not be moved until required for redistribution unless approved by the Division.

Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials would be detrimental to the quality or quantity of those materials, the Division may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that: such action will not permanently diminish the capability of the topsoil of the host site; and, the material will be retained in a condition more suitable for redistribution than if stockpiled.

The Division may require that the B horizon, C horizon, or other underlying strata, or portions thereof, be removed and segregated, stockpiled, and redistributed as subsoil in accordance with the above requirements if it finds that such subsoil layers are necessary to comply with the revegetation.

### Analysis:

#### Removal and Storage

The permittee conducted a soil investigation of the leach field and water tank area in October 2001. The permittee concluded that no topsoil was present at either site. The permittee stated that the areas have been disturbed in the past. However, the permittee will salvage approximately 1–3 inches of material. The material to be removed appears to be remnants of a C-horizon. This material is grayish brown loose, sandy and silty loam with some fine to coarse gravel. Below the C-horizon are remnants of the C2-horizon that consisted of brown very

## OPERATION PLAN

---

gravelly sand. The gravel was fine to course and large sandstone cobbles were present. The soils were dry.

The permittee will remove approximately 26 cubic yards of C-horizon and will be placed temporarily on the existing leach field. The C2-horizon being removed is mostly from the excavation of the laterals or trenches and will be stored separately. The C2-horizon will be used to backfill the trenches and the C-horizon will be topsoil for the leach field.

### Findings:

The information provided is considered adequate and meets the requirements of this section.

## VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

### Minimum Regulatory Requirements:

Each application will contain a plan for protection of vegetation, fish, and wildlife resources throughout the life of the mine. The plan will provide a description of the measures taken to disturb the smallest practicable area at any one time and through prompt establishment and maintenance of vegetation for interim stabilization of disturbed areas to minimize surface erosion. This may include part or all of the plan for final revegetation as described in reclamation plan for revegetation.

For UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES a description of the anticipated impacts of subsidence on renewable resource lands and how such impact will be mitigated needs to be presented.

A description of how, to the extent possible, using the best technology currently available, the operator will minimize disturbances and adverse impacts. This description will include protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, the monitoring of surface water quality and quantity, and through prompt establishment and maintenance of vegetation for interim stabilization of disturbed areas to minimize surface erosion.

### Analysis:

The permittee will reseed the leach field area with the approved seed mix that is in the Mining and Reclamation Plan.

### Findings:

The permittee has met the requirements for this section of the R645 Coal Rules.

## HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-148,

## **OPERATION PLAN**

-301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

### **Minimum Regulatory Requirements:**

#### **Siltation Structures: Exemptions**

Exemptions to the requirements of this section may be granted if: the disturbed drainage area within the total disturbed area is small; and, the operator demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed drainage areas to meet effluent limitations and applicable State and Federal water-quality standards for the receiving waters.

### **Analysis:**

#### **Exemptions for siltation structures**

The leach field in Convulsion Canyon will be classified as an alternate sediment control area. The permittee will use silt fences, and berms to treat the water runoff from this area.

### **Findings:**

The information provided is considered adequate and meets the requirements of this section.

## **SUPPORT FACILITIES AND UTILITY INSTALLATIONS**

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

### **Minimum Regulatory Requirements:**

Each applicant for an underground coal mining and reclamation permit shall submit a description, plans, and drawings for each support facility to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall include a map, appropriate cross sections, design drawings, and specifications sufficient to demonstrate compliance.

Support facilities shall be operated in accordance with a permit issued for the mine or coal preparation plant to which it is incident or from which its operation results. In addition to the other provisions of this part, support facilities shall be located, maintained, and used in a manner that: prevents or controls erosion and siltation, water pollution, and damage to public or private property; and, to the extent possible using the best technology currently available, minimizes damage to fish, wildlife, and related environmental values and minimizes additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law.

All surface and underground mining activities shall be conducted in a manner which minimizes damage, destruction, or disruption of services provided by oil, gas, and water wells; oil, gas, and coal-slurry pipelines, railroads; electric and telephone lines; and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the Division.

Support facilities shall be operated in accordance with a permit issued for the mine or coal preparation plant to which it is incident or from which its operation results. In addition to the other provisions of this part, support facilities shall be located, maintained, and used in a manner that prevents or controls erosion and siltation, water pollution, and damage to public or private property. Support facilities shall, to the extent possible using the best technology currently available, minimizes damage to fish, wildlife, and related environmental values; and, minimizes additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law.



## OPERATION PLAN

---

### **Analysis:**

The permittee has requested to expand the culinary and sewage systems capacities. The amendment proposes two additional 10,000-gallon water tanks and an additional 0.40 acres of leach field expansion. These additions are on the Extended East Spring Canyon Surface Facilities Map, Plate 5-2B.

### **Findings:**

The proposed amendment has met the requirements of this section in the R645 Coal Rules.

## **MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

### **Minimum Regulatory Requirements:**

Each application shall contain maps, plans, and cross sections which show the mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown and described as an existing structure.

The following shall be shown for the proposed permit area:

#### **Mining facilities maps**

Location of each facility used in conjunction with mining operations. Such structures and facilities shall include, but not be limited to: buildings, utility corridors, roads, and facilities to be used in mining and reclamation operations or by others within the permit area; each coal storage, cleaning, and loading area; each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area; each water diversion, collection, conveyance, treatment, storage and discharge facility; each source of waste and each waste disposal facility relating to coal processing or pollution control; each facility to be used to protect and enhance fish and wildlife related environmental values; each explosives storage and handling facility; location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing water dam and embankment, and disposal areas for underground development waste and excess spoil; and, each plan or profile, at cross sections specified by the Division, of the anticipated surface configuration to be achieved for the affected areas during mining operations.

### **Analysis:**

---

OPERATION PLAN

---

**Mining facilities maps**

The permittee has submitted an updated surface facilities map, Plate 5-2B showing the construction of two 10,000-gallon water tanks and 0.40 acres expansion of the leach field. This map is P.E. certified by Wesley K. Sorensen badge number #159457.

**Findings:**

This section of the proposed amendment meets the requirements of the R645 Coal Rules.

Page 8  
C/041/002-01C-1  
October 25, 2001

## OPERATION PLAN

---

**RECLAMATION PLAN**

---

# **RECLAMATION PLAN**

## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

### **Minimum Regulatory Requirements:**

#### **General**

After a permit application has been approved, but before a permit is issued, the applicant shall file with the Division, on a form prescribed and furnished by the Division, a bond or bonds for performance made payable to the Division and conditioned upon the faithful performance of all the requirements of the Act, the regulatory program, the permit, and the reclamation plan.

The bond or bonds shall cover the entire permit area, or an identified increment of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations during the initial term of the permit. As surface coal mining and reclamation operations on succeeding increments are initiated and conducted within the permit area, the permittee shall file with the Division an additional bond or bonds to cover such increments.

The operator shall identify the initial and successive areas or increments for bonding on the permit application map and shall specify the bond amount to be provided for each area or increment. Independent increments shall be of sufficient size and configuration to provide for efficient reclamation operations should reclamation by the Division become necessary.

An operator shall not disturb any surface areas, succeeding increments, or extend any underground shafts, tunnels, or operations prior to acceptance by the Division of the required performance bond.

The applicant shall file, with the approval of the Division, a bond or bonds under one of the following schemes to cover the bond amounts for the permit area as determined: a performance bond or bonds for the entire permit area; a cumulative bond schedule and the performance bond required for full reclamation of the initial area to be disturbed; or, an incremental-bond schedule and the performance bond required for the first increment in the schedule.

### **Analysis:**

#### **General**

The bonding amount to remove the pump house is \$9,000, which is an increase of 0.2% of the current bond. The cost of removal is a small amount and no immediate change in the bond will be needed. The bond can be adjusted during permit renewal.

### **Findings:**

The information submitted meets the minimum requirements of this section in the R645 Coal Rules.

Page 10  
C/041/002-01C-1  
October 25, 2001

## RECLAMATION PLAN

---

---

## RULES INDEX

### 30 CFR

774.13.....	4
784.14.....	4
784.16.....	4
784.29.....	4
817.180.....	5
817.181.....	5
817.41.....	4
817.42.....	4
817.43.....	4
817.45.....	4
817.49.....	4
817.56.....	5
817.57.....	5
Sec. 773.17.....	4
Sec. 784.23.....	6
Sec. 784.30.....	5
Sec. 817.22.....	3

### R645

300 141 .....	5
300 142 .....	5
300 143 .....	5
300 144 .....	5
300 145 .....	5
300 146 .....	5
300 147 .....	5
300 148 .....	5
301 331 .....	4
301 332 .....	4
301 512 .....	5, 6
301 514 .....	5
301 521 .....	5, 6
301 526 .....	5
301 531 .....	5
301 532 .....	5
301 533 .....	5
301 536 .....	5
301 542 .....	5, 6
301 632 .....	6
301 720 .....	5
301 731 .....	5, 6
301 732 .....	5

---

301	733	5
301	742	5
301	743	5
301	750	5
301	761	5
301	764	5
302	323	6
R645-		
300	140	5
301	230	3
301	330	4

O:\041002.CON\FINAL\ta\TA\_01C-1.doc